ADVANCES IN MATHEMATICS 67, 239–240 (1988)

Book Reviews

B. DEWITT, *Supermanifolds*, Cambridge University Press, 1984, 316 pp.

P. G. O. FREUND, *Supersymmetry*, Cambridge University Press, 1986, 152 pp.

The "super" game is now in full swing. What will be super-ized next? Algebraists knew a long time ago that whenever something had been done with a polynomial algebra, something "analogous" would soon be done with an exterior algebra. Grassmann sensed it a long time ago, but nobody paid attention to him, for reasons that it would be shameful to explain. Then came the physicists with their particles, and the game began to sound a little more serious, though the mathematics got terribly sloppy in the process. Now comes a new generation of physicist–mathematicians that threatens to turn everything straight (literally: a plus sign is worth as much as a minus sign) and to create a new math in the process.

W. H. SCHIKHOF, *Ultrametric Calculus and Introduction to p-adic Analysis*, Cambridge University Press, 1984, 306 pp.

Most treatises on p-adic analysis are unfetteringly motivated by applications to number theory. Here is one that is motivated by analogies with real analysis, and consequently that can serve as an introduction for the analyst who believes that inequalities come first.

J. LAMBEK and P. J. SCOTT, *Introduction to Higher Order Categorical Logic*, Cambridge University Press, 1986, 296 pp.

Here is another triple of unlikely bedfellows: on the one side, the theory of Cartesian closed categories, on the other side, the lambda calculus of Alonzo Church, and, beaming in the middle, the abstract theory of computer programming. A fine time for translators, and a better time for the authors of this book, who manage to give credit where credit is due, not to upstage anyone, and to convince the reader that something really new is happening in logic.

V. I. PAULSEN, *Completely Bounded Maps and Dilations*, Longman Scientific and Technical, 1986, 187 pp.

An urbane and unusually well-written account of what is probably the most elegant chapter in the theory of operators in Hilbert space since the spectral theorem. Stinespring's theorem and the various techniques of dilations are sagely blended and extended to their proper degree of generality. Come back soon.

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